Supplement to the

"Proceedings of the Indian Academy of Sciences"

INDEX TO VOL. LXV (A)

AUTHORS' INDEX

Anantakrishnan, Sekharipuram V. and Venkatarathnam, R. V. — Kinetic studies in ester hydrolysis, XVI, XVII, 188, 298.

Ananthakrishnan, S. and Ramanathan, K. R. — Delayed effects of sudden ionospheric disturbances on 164 Kc/s transmission between Tashkent and Ahmedabad, 38.

Apparao, M. V. K. .. — High energy photons from the crab nebula due to the universal microwave field, 349.

Athavale, R. N., Lal, D. and Rama — The measurement of tritium activity in natural waters, II, 73.

Biswas, S., Lavakare, P. J., Ramadurai, S. and Sreenivasan, N. — He^8 nuclei in the low energy primary cosmic radiation, 104.

Chaudhari, K. N., Ganguli, S. N., Rao, N. K. and Swami, M. S. — Study of hyperfragments, V, 240.

Daniel, R. R. and Stephens, S. A. — Recent observations on cosmic electrons and their consequences on different cosmic ray models and related astrophysical quantities, 319.

Dhingra, M. M. .. — *See* Kanekar and others.

.. — Aromaticities of monosubstituted benzenes and thiophenes, 203.

Ganguli, S. N. .. — *See* Chaudhari and others.

Ganguli, S. N., Rao, N. K. and Swami, M. S. — Determination of the flux of primary cosmic ray hydrogen and helium nuclei near the geomagnetic equator using nuclear emulsions, III, 19.

Girish Chandra .. — Measurement of true angular correlation in Fe^{57} in a single crystal of metallic cobalt, 25.

Govil, G. .. — *See* Kanekar and others.

.. — *See* Dhingra and others.

Halbgewachs, R. D. and Shah, S. M.	Trigonometric sums and Fresnel-type integrals, 227.
Jijee, K. and Santappa, M. ..	Vinyl polymerization, IV, 124.
..	Oxidation studies, II, 155.
Kanekar, C. R. ..	*See* Dhingra and others.
Kanekar, C. R., Govil, G. and Khetrapal, C. L.	Proton chemical shifts and pi-electron densities in substituted benzenes, 353.
Kanekar, C. R., Govil, G., Khetrapal, C. L. and Dhingra, M. M.	Solvent effects on proton chemical shifts in thiophenes, 195.
..	Self-association in aromatic thiols, 265.
Kartha, V. B., Kartha, Santha, B. and Narasimham, N. A.	Infra-red spectral studies of CHF_2-$CHCl_2$ and $CBrCl_2$-$CBrCl_2$, 1.
Kartha, Santha, B. ..	*See* Kartha and others.
Khetrapal, C. L. ..	*See* Kanekar and others.
..	*See* Dhingra and others.
Krishnamurthy, V. N. and Soundararajan, S.	Antipyrine complexes of rare earth perchlorates, 148.
Krishnan, T. V. and Nigam, Amar Nath	Thickness effect in the X-ray K absorption edge of nickel, 45.
Kumar, A. N. and Nigam, H. L.	Complex formation between cadmium and thiosalicylic acid, 119.
Lal, D. ..	*See* Athavale and others.
Lavakare, P. J. ..	*See* Biswas and others.
Mahapatra, S. and Subrahmanya, R. S.	Studies in the hydrolysis of metal ions, I, 283.
Malaviya, S. C. ..	Derivation of transitional asymptotic expansions from integral representations, I, 62.
Mande, Chintamani and Nigavekar, A. S.	X-ray spectroscopic evidence for chemical bonding in manganese selenide (MnSe), 376.
Mehta, Yoginder Kumar ..	Thermal stresses in a plate with transversely isotropic material, 170.
Nagaraj, Muppinaiya ..	Note on the locally product and almost locally product structures, 270.
Narasimham, N. A. ..	*See* Kartha and others.
Nigam, Amar Nath ..	*See* Krishnan and Nigam.

Nigam, H. L. .. *See* Kumar and Nigam.

Nigavekar, A. S. .. *See* Mande and Nigavekar.

Parihar, C. L. .. On integrals involving hypergeometric functions, 291.

Rama .. *See* Athavale and others.

Ramadurai, S. .. *See* Biswas and others.

.. The effect of ionisation loss on the energy spectra of cosmic ray nuclei undergoing Fermi acceleration, 219.

Raman, A. .. Structural study of Niobium-iron alloys, 256.

Ramanathan, K. R. .. *See* Ananthakrishnan and Ramanathan.

Rao, N. K. .. *See* Ganguli and others.

... *See* Chaudhari and others.

Rao, J. Sudarsana .. A note on the inversion of the convolution transform, 233.

Reddy, T. Ramasubba and Srinivasan, R. ESR study of dibarium copper formate tetrahydrate, I, II, 303, 368.

.. *See* Ganguli and others.

Sampathkumar, E. ... On a class of sets, I, 143.

Sankaranarayanan, R. ... Yield surfaces for non-homogeneous anisotropic shells of revolution, 49.

Santappa, M. .. *See* Jijee and Santappa.

Shah, S. M. .. *See* Halbgewachs and Shah.

Singh, G. B. and Venkateswarlu, Putcha Paramagnetic resonance of Gd^{3+} in $SmCl_3 \cdot 6H_2O$ single crystals, 211.

.. EPR spectrum of gadolinium in hydrated praseodymium nitrate, 361.

Sinha, D. K. .. Mechanical response in a piezoelectric transducer subjected to a constant flow of heat and a step-voltage input, 136.

Soundalgekar, V. M. .. On the flow of an electrically conducting, incompressible fluid near an accelerated plate in the presence of a parallel plate, under transverse magnetic field, 179.

Soundararajan, S. ... *See* Krishnamurthy and Soundararajan.

Srinivasan, G. and Venkatasubramanian, N.		Conformational aspects in chromic acid oxidations—oxidation of some cyclanols by chromium (VI) oxide, 30.
Sreenivasan, N.	..	*See* Biswas and others.
Srinivasan, R.	..	*See* Reddy and Srinivasan.
Stephens, S. A.	..	*See* Daniel and Stephens.
Subrahmanya, R. S.	..	*See* Mahapatra and Subrahmanya.
Swami, M. S.	..	*See* Chaudhari and others.
Vasantha, S.	..	High speed binary rate multiplier, 340.
Venkatarathnam, R. V.	..	*See* Anantakrishnan and Venkatarathnam.
Venkatasubramanian, N.	..	*See* Srinivasan and Venkatasubramanian.
Venkateswarlu, Putcha	..	*See* Singh and Venkateswarlu.

TITLE INDEX

Angular correlation, true, in Fe^{57} in a single crystal of metallic cobalt, measurement of (Girish Chandra), 25.

Aromatic thiols, self-association in (Kanekar and others), 265.

Aromaticities of monosubstituted benzenes and thiophenes (Dhingra and others), 203.

Asymptotic expansions, transitional, derivation of, from integral representations, I (Malaviya), 62.

Binary rate-multiplier, high speed (Vasantha), 340.

Cadmium and thiosalicylic acid, complex formation between (Kumar and Nigam), 119.

Chromic acid oxidations—oxidation of some cyclanols by chromium (VI) oxide, conformational aspects in (Srinivasan and Venkatasubramanian), 30.

Convolution transform, inversion of the, a note on (Rao), 233.

Cosmic electrons and their consequences on different cosmic ray models and related astrophysical quantities, recent observations on (Daniel and Stephens), 319.

Cosmic radiation, low energy primary, He^3 nuclei in the (Biswas and others), 104.

Cosmic ray hydrogen, primary, and helium nuclei near the geomagnetic equator, determination of the flux of, using nuclear emulsions, III (Ganguli and others), 19.

Cosmic ray nuclei undergoing Fermi acceleration, energy spectra of, the effect of ionisation loss on (Ramadurai), 219.

EPR spectrum of gadolinium in hydrated praseodymium nitrate (Singh and Venkateswarlu), 361.

ESR study of dibarium copper formate tetrahydrate, I, II (Reddy and Srinivasan), 303, 368.

Ester hydrolysis, kinetic studies in, XVI, XVII (Anantakrishnan and Venkatarathnam), 188, 298.

Flow of an electrically conducting, incompressible fluid near an accelerated plate in the presence of a parallel plate, under transverse magnetic field (Soundalgekar), 179.

Hydrolysis of metal ions, studies in the, I (Mahapatra and Subrahmanya), 283.

Hyperfragments, study of, V (Chaudhari and others), 240.

Hypergeometric functions, on integrals involving (Parihar), 291.

Infra-red spectral studies of CHF_2–$CHCl_2$ and $CBrCl_2$–$CBrCl_2$ (Kartha and others), 1.

Ionospheric disturbances, sudden, on 164 Kc/s transmission between Tashkent and Ahmedabad, delayed effects of (Ananthakrishnan and Ramanathan), 38.

Locally product and almost locally product structures, note on the (Nagaraj), 270.

Niobium-ion alloys, structural study of (Raman), 256.

Oxidation studies, II (Jijee and Santappa), 155.

Paramagnetic resonance of Gd^{3+} in $SmCl_3 \cdot 6H_2O$ single crystals (Singh and Venkateswarlu), 211.

Photons, high energy, from the crab nebula due to the universal microwave field (Apparao), 349.

Piezoelectric transducer subjected to a constant flow of heat and a step-voltage input, mechanical response in (Sinha), 136.

Polymerization, Vinyl, IV (Jijee and Santappa), 124.

Proton chemical shifts and pi-electron densities in substituted benzenes (Kanekar and others), 353.

Proton chemical shifts in thiophenes, solvent effects on (Kanekar and others), 195.

Rare earth perchlorates, antipyrine complexes of (Krishnamurthy and Soundararajan), 148.

Sets, on a class of, I (Sampathkumar), 143.

Shells of revolution, non-homogeneous anisotropic, yield surfaces for (Sankaranarayanan), 49.

Thermal stresses in a plate with transversely isotropic material (Mehta), 170.

Trigonometric sums and Fresnel-type integrals (Halbgewachs and Shah), 227.

Tritium activity in natural waters, the measurement of, II (Athavale and others), 73.

X-ray K absorption edge of nickel, thickness effect in (Krishnan and Nigam), 45.

X-ray spectroscopic evidence for chemical bonding in manganese selenide (MnSe) (Mande and Nigavekar), 376.